IDENTIFICATION OF SOME STRATEGIES FOR ENHANCING KINESTHETIC INTELLIGENCE

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Abstract

Intelligence is the ability to creatively solve problems, learn and integrate new information, and offer something of value in a culture. Intelligence is the ability to create an effective product or offer a service that is valued in a culture. It is a set of skills that make it possible for a person to solve problems in life. It is also the potential for finding or creating solutions for problems, which involves gathering new knowledge. Bodily kinesthetic intelligence involves a high sense of self – awareness of one's body for expression. People with this form of intelligence are said to possess balance, grace and speed and use the same for understanding and expressing varied ideas and feelings. It also includes the skill to use hands to create and transform things. "Great ideas originate in the muscles" – Thomas Edison. Play catch, take up physical performing art balancing, play kick, play physical games, make forms of, take up storytelling etc are some of the strategies for enhancing kinesthetic intelligence. Maths activities like cards and dice, using manipulatives, computer time, food math, scavenger hunt, act it out etc. can also enhance kinesthetic intelligence. Making the children a kinesthetic learner can lead them to have better kinesthetic intelligence.

INTRODUCTION

Intelligence is the ability to creatively solve problems, learn and integrate new information, and offer something of value in a culture. Intelligence is the ability to create an effective product or offer a service that is valued in a culture. It is a set of skills that make it possible for a person to solve problems in life. It is also the potential for finding or creating solutions for problems, which involves gathering new knowledge.

"Great ideas originate in the muscles" – Thomas Edison

All of the most basic facts about the world are first discovered through physical means. As the brain matures, facts are abstracted and related to other concepts. Although the ability to abstract a concept and make complex connections between concepts are considered to be signatures of a mature mind, humans learn best by doing something concrete first, and then abstracting to more general concepts.(Jean Piaget)

In addition to cognitive and affective taxonomies, Bloom (as well as Dave and Harrow) developed a psychomotor taxonomy. The taxonomy ranges from basic proprioception to the ability to improvise new and complex movement.(**Benjamin Bloom**)

Intelligence is a multifaceted quality that cannot be measured by a single score on a test. Furthermore, some types of intelligence are not even located in the brain. For example, an understanding of space and motion is a distinct kind of intelligence that is useful to the athlete, dancer, martial artist and engineer. (Howard Gardner).

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Children have different learning modes or unique learning styles. They have different ways of learning depending on the way they absorb and assimilate information. Some kids recall information well by things that are seen or read (visual), for some auditory input is most valuable, others find it hard to acquire information unless they use them in real-life activities and are what we call Kinesthetic learners.

Once we understand that movement is a learning style, the more success we will have with kinesthetic learners Bodily kinesthetic intelligence involves a high sense of self – awareness of one's body for expression. People with this form of intelligence are said to possess balance, grace and speed and use the same for understanding and expressing varied ideas and feelings. It also includes the skill to use hands to create and transform things.

The most effective way of improving this form of intelligence is through the medium of activities and movements. These are useful for those at young age. Studies show that most of the school population excels through kinesthetic learning. They prefer a "hands on" or "doing" approach to build understandings. They are most successful when they are engaged in hands on activity rather than sitting for hours in a classroom. These types of learners also like to participate in science experiments, drama, dance and educational trips. They learn more in small or large groups and enjoy educational games or educational materials such as flash cards or blocks.

ADVANTAGES OF KINESTHETIC LEARNING

Kinesthetic learning has the advantage of letting children gain selfknowledge by letting them learn at their own comfort level, confidence level and with their own creative potentials. With this style of learning, children are also engaged in positive social interaction, develop problem solving skills and can apply creativity through self-expression. Because of these many advantages of Kinesthetic learning, Education is now shifting to the idea of interactive teaching techniques. Hands on teaching are becoming more popular because it addresses not only the needs of kinesthetic learners but also the needs of visual and auditory learners. Therefore, Kinesthetic learning is beneficial for all students and can aid in overall cognitive development. Thus there are many invaluable benefits to kinesthetic learning activities:

Help students create a connection between language and its concepts. An example would be improvising creative movements/materials to show the different concepts such as "big and small". A simple activity of mimicking an animal action or sound can also help them establish associations between words, sounds and meanings.

Increased Comprehension. A concept can be understood better with physical activities. An example will be an engaging activity such as spelling dance. Spelling challenges can be overcome by this activity where children can practice letter combination using bodily gestures and a hip music that will keep it more interesting to children. Dance can also be incorporated in teaching other language concepts such as synonyms and antonyms.

Repetitive Exercise Builds Muscle and Brain Strength

Whether physical repetition strengthens muscle memory or builds confidence, physical exercise brings results. Sometimes we need to change. Other times, we need to learn from the differences in experimentation.

Kinesthetic Learning Appeals to Everybody

With the added benefits of physical movement such as exercise, kinesthetic learning appeals not only to those to whom it comes naturally but also to anyone looking for ways to improve their intelligence. If we also see results in how our body changes with exercise, we have another positive reinforcement from kinesthetic learning.

WHAT ARE THE STRENGTHS OF THE KINESTHETIC LEARNER?

- Learns best through movement
- Will focus on the whole picture
- o Learns best with 3-D materials

 \circ Needs to move while processing new information, but with very little external stimulation that would distract (let the body move but limit objects and visuals in the environment that would capture their focus away from the lesson)

- o Needs to learn using hands-on activities to process learning
- Is often highly intuitive

 $\circ~$ Needs to physically process what he is learning - let them actually do the work rather than listen to how it is done

SOME STRATEGIES FOR ENHANCING KINESTHETIC INTELLIGENCE

The following are certain classroom activities as well as other forms of activities that feature under bodily- kinesthetic intelligence.

PLAY CATCH

Engage in playing catch. This not only involves using movement, but also helps develop coordination by learning to judge a catch based on the speed and distance of the ball. Along with that, it also promotes superb hand-eye coordination. Another excellent variation to this simple activity is playing with throwing rings or Frisbees or playing basketball.

TAKE UP PHYSICAL PERFORMING ARTS

Any form of physical performing arts, like dancing, acting, or gymnastics, involves making optimum use of the body to express something. Thus, it encourages understanding varied concepts through the medium of movement and encourages the expression of feelings and ideas through the same. Taking up these activities trains the body to understand and express things more physically.

BALANCING

Balance beams are everywhere: fallen trees, curbs, short walls, a line of chalk on the driveway – be creative! Other balance-related activities include hopping on one foot, walking on tiptoes, doing headstands and handstands, or jumping from one spot to another.

PLAY KICK.

Much like playing catch, playing kick is a fun and easy way to develop coordination and muscle control. As your child's skills improve you can move farther apart, practice passing back and forth while running across the yard, and play keepaway.

PLAY PHYSICAL GAMES

Anything and everything that involves using movements and physical actions is a great way of developing bodily-kinesthetic intelligence. Climbing trees, playing charades and hopscotch, and playing sports are all activities that help train the mind to understand and express through movement.

MAKE FORMS OF

A highly fun activity that can be tried in the classroom setting (especially) or even at an orientation program or a similar setting is where the teacher or leader asks the group to form shapes of the letters of the alphabet. This seemingly simple task encourages the group to understand what is being said and then display the talent to be able to contort and move their bodies to imitate the shape of the letter. This can be played either way, in that, demonstrating a letter and then asking them to imitate it or simply stating a letter and then asking them to formulate the same. The latter also helps develop an additional skill of listening and then interpreting.

TAKE UP STORYTELLING

Another activity that is known to help tremendously in building this intelligence is to ask the group to act out a story without saying anything and using only actions to relate the same. An interesting twist to this exercise can be brought about by making use of puppets. This is another way in which the limiting factors help to further enhance the movements.

OBSTACLE COURSE

An obstacle course is not only a lot of fun, but is also a great way to enhance bodily-kinesthetic skills. The kind of physical activities that form a part of this course, like using the jump rope, using the hula hoop, climbing trees, going up ladders, jumping walls, crossing puddles (for instance)—all these activities help develop hand-eye coordination and using your body movements to carry forth an action in its entirety to garner success.

BUILD THINGS

Encourage the group to build something either on the basis of models provided or simply by using their imagination power. Things that can be made use of for carrying forth this activity could include using ready-made clay or sand, or even mud and cooking flour with some water. This is not only a highly enjoyable activity for all age groups, but it also helps in training the mind to build things. For adults or older children, sculpting and pottery can also be looked into as a viable option.

Introducing any of these activities, or even a combination of these activities in your day-to-day routine will definitely help build and enhance bodily-kinesthetic intelligence.

MATH ACTIVITIES FOR KINESTHETIC LEARNERS

Effective math teachers show students how to use manipulative to illustrate abstract concepts. Not all children learn the same way, and math teachers must take into consideration several learning styles to reach most students. Gone are the days when the math teacher stands at the board and completes examples of problems that students will see as class work or homework. Also conspicuously absent are students bent over math worksheets or page after page of math problems.

The modern-day math classroom is interactive and hands-on. In addition to presenting mathematical concepts visually and orally, teachers must extend their teaching to another significant portion of the learning population: the kinesthetic learner who must move around and touch objects to grasp elusive concepts.

CARDS AND DICE

Reaching out to kinesthetic learners does not have to stretch the school's budget. Inexpensive items such as regular playing cards and dice can serve as instruments of learning. Students review addition and multiplication facts by dealing two regular playing cards and performing mathematical operations on the numbers found on the cards dealt. Dice can be used in much the same way. The familiar card game, Go Fish, helps younger learners identify numbers.

Flash cards often can be found in an elementary teacher's math supply closet, and allow kinesthetically oriented students a chance for motion. Teachers also often play "Around the World" with students to review math facts. Students enjoy the movement and the competition, while teachers revel in the increase in the class's automatic math fact recognition

USING MANIPULATIVES

Some math textbook companies include a classroom set of math manipulatives. These manipulatives are objects that can be handled to enhance the math experience, and vary depending on the math level. Manipulatives include blocks and number lines for counting and performing simple math operations; spinners, marbles and double-sided counters for work with probability and ratios; clocks for telling time; and fake paper money and coins for units on counting and changing money. Teachers use these manipulatives to transform abstract mathematical concepts into concrete activities.

COMPUTER TIME

Students always enjoy time on the computer, so computer time can be effective during a math lesson. If the classroom computers have internet capability, bookmark math websites that allow students to play interactive games corresponding to your math lesson. Additionally, some math textbook kits include a CD containing math programs. Use this software to reinforce math concepts such as addition, subtraction, multiplication and division. More sophisticated software programs exist for students to practice graphing techniques and solve complicated word problems.

FOOD MATH

The four arithmetic operations — addition, subtraction, multiplication and division — lend themselves naturally to interaction with the food world. Colorful candy can be used to teach addition, subtraction, multiplication and division. Candies also go well with fraction, statistics, ratio and probability units, especially if you use the candy colors to your advantage. Students have fun eating their manipulatives after the lesson. Bring in fruits such as apples, pears and oranges to introduce lessons on fractions. Demonstrate fractions by cutting different portions of the fruit into common fractions, such as halves, thirds, quarters, fifths and sixths. At the end of the fractions unit, reward your students for their hard work by having a pizza party or pie tasting. Split the pizzas or pies into various sections to review fraction concepts with your students before allowing them to consume the food.

SCAVENGER HUNT

Let your class run wild during math time. With lessons on two-dimensional and three-dimensional shapes, engage your students in a treasure hunt around the classroom. After ensuring your students have become familiar with each of the shapes in your lesson, provide students with a list of shapes you want students to find within the classroom. This activity gets your students moving, touching objects and exploring shapes in a tangible way.

ACT IT OUT

Arguably, one of the most difficult areas for students in math is solving word problems. Although word problems should reflect real-world mathematical conundrums, many of the word problems seen in textbooks mean nothing to the student. Have groups of students create skits in which they act out a mathematical problem and solution related to the concept being studied. For example, to illustrate the concept of subtraction, students can perform a skit in which they borrow supplies from one another. This strategy gets students out of their chairs, translates words into actions, and draws relationships between math and students' everyday lives. If you are teaching steps for solving a problem, have students imagine they following the steps. Their attention follows their hands. Encourage them to draw sketches or diagrams of what they are hearing in a lesson, or when doing a sheet of math problems, teach them to point to each problem they come to. Let them use flashcards with information they are learning.

CHALLENGES OF KINESTHETIC LEARNING

• Students can quickly transition an activity to an unproductive tangent. It is therefore important keep the class on task and has ready a clear ending.

• Kinesthetic activities will be remembered and powerfully linked to a concept. Developing an activity for a minor concept could give students the wrong perspective on the goals of the course. A poorly designed activity could enhance a misconception. It is suggested that any limitations of the activity be pointed out during or after the activity.

• Many students are not accustoming to leaving their seats and participating in an activity. It is possible that some students will feel uncomfortable. It is best to start with low-stakes activities.

• It is not clear how kinesthetic learning will translate to large class sizes.

• Students may initially resist the idea that activities are a vehicle for deep understanding. Instead they may view the time as a mental recess. It may take effort on the part of the instructor, as well as a clear articulation of the goals, to instigate the proper attitude.

CONCLUSION

"The great aim of education is not knowledge but action." - Herbert Spencer

The core elements of the bodily-kinesthetic intelligence are control of one's bodily motions and the capacity to handle objects skillfully. This also includes a sense of timing, a clear sense of the goal of a physical action, along with the ability to train responses. People who have bodily-kinesthetic intelligence should learn better by involving muscular movement (e.g. getting up and moving around into the learning experience), and be generally good at physical activities such as sports, dance, acting, and making things. Give children plenty of outdoor time. A small study of children with attention deficit hyperactivity disorder last year found that walks outdoors appeared to improve scores on tests of attention and concentration. Let them move! They will learn more quickly and effectively if you let them stand at their desk, swing their legs, pace the floor - as long as they are not disrupting other students. Break up long lessons into smaller chunks, change teaching location (sit on rug, sit in desks, go outside, switch seats, etc.). Making the children a kinesthetic learner can lead them to have better kinesthetic intelligence. There are many challenges for kinesthetic learning. Overcoming the constraints by proving more importance to kinesthetic learning in our schools can enhance kinesthetic intelligence among students, thereby molding them into a personality of good physical and mental power.

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